

# **Cordless Slide Compound Saw**

**Equipped with Electric Brake** 

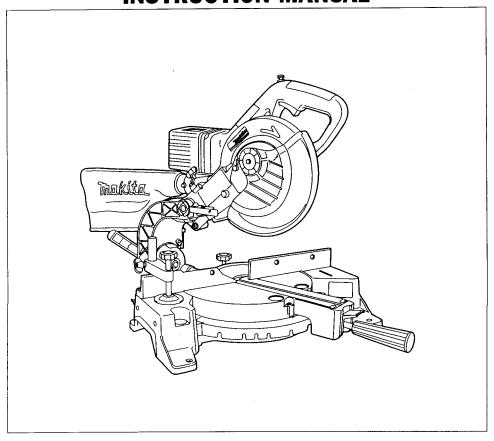
190 mm (7-1/2") MODEL BLS712SF / MODEL BLS712SFE

With High Capacity Battery Charger

190 mm (7-1/2") MODEL BLS712SH / MODEL BLS712SHE

With High Capacity Battery Charger

# **INSTRUCTION MANUAL**



# **SPECIFICATIONS**

#### Model BLS712

Blade diameter	180 mm (7-1/8'') -	190 mm (7	-1/2")
Hole (arbor) diameter		15.88 mm	(5/8'')

Max. cutting capacities (H x W) with blade 190 mm (7-1/2") in diameter

Mitar angla	Bevel	angle
Miter angle	0°	45° (left)
0°	50 mm x 182 mm (2" x 7-1/8")	35 mm x 182 mm (1-3/8'' x 7-1/8'')
45° (left and right)	50 mm x 127 mm (2'' x 5'')	35 mm x 127 mm (1-3/8'' x 5'')

#### (Note)

The max. cutting capacities may vary according to workpiece, blade and/or charging condition.

No load speed (RPM)	2,300/min.
Dimensions (L x W x H)	0 mm x 454 mm
(21-5/8" x	17" x 17-7/8")

Battery Cartridge B2417	Model DC24SA High Capacity Battery Charger		
Voltage	Input Output Charging tir		
24 V	A.C. only 50 Hz - 60 Hz	D.C. 7.2 V — 24 V	30 min.

Battery Cartridge B2430	Model DC24SA High Capacity Battery Charger		
Voltage	Input Output Charging t		
24 V	A.C. only 50 Hz - 60 Hz	D.C. 7.2 V — 24 V	60 min.

<sup>•</sup> Manufacturer reserves the right to change specifications without notice.

WARNING: For your personal safety, READ and UNDERSTAND before using.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

<sup>•</sup> Note: Specifications may differ from country to country.

# For Your Own Safety Read Instruction Manual Before Operating Tool Save it for future reference GENERAL SAFETY PRECAUTIONS (For All Tools)

- KNOW YOUR POWER TOOL. Read the owner's manual carefully. Learn the tool's applications and limitations, as well as the specific potential hazards peculiar to it.
- 2. KEEP GUARDS IN PLACE and in working order.
- REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 4. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.
- DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted. Don't use tool in presence of flammable liquids or gases.
- KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
- 7. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 9. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
- 10. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- 12. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
- 13. DON'T OVERREACH. Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- 15. DISCONNECT BATTERY FROM TOOL before servicing; when changing accessories such as blades, bits, cutters, and the like.

- 16. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before inserting battery.
- 17. USE RECOMMENDED ACCESSORIES. Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
- 18. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- 20. DIRECTION OF FEED. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
- 21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.

# ADDITIONAL SAFETY RULES

- 1. Wear eye protection.
- Keep hands out of path of saw blade. Avoid contact with any coasting blade. It can still cause severe injury.
- 3. Do not operate saw without guards in place.
- 4. Do not perform any operation freehand. The workpiece must be secured firmly against the turn base and guide fence with the vise during all operations. Never use your hand to secure the workpiece.
- 5. Never reach around saw blade.
- Turn off tool and wait for saw blade to stop before moving workpiece or changing settings.
- 7. Remove battery from tool before changing blade or servicing.
- 8. To reduce the risk of injury, return carriage to the full rear position after each crosscut operation.
- 9. Always secure all moving portions before carrying the tool.
- 10. Stopper pin which locks the cutter head down is for carrying and storage purposes only and not for any cutting operations.
- 11. Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.
- 12. Don't use the tool in the presence of flammable liquids or gases.
- 13. Check the blade carefully for cracks or damage before operation. Replace cracked or damaged blade immediately.
- 14. Use only flanges specified for this tool.
- 15. Be careful not to damage the arbor, flanges (especially the installing surface) or bolt. Damage to these parts could result in blade breakage.
- 16. Make sure that the turn base is properly secured so it will not move during operation.
- 17. For your safety, remove the chips, small pieces, etc. from the table top before operation.
- 18. Avoid cutting nails. Inspect for and remove all nails from the workpiece before operation.
- 19. Make sure the shaft lock is released before the switch is turned on.
- 20. Be sure that the blade does not contact the turn base in the lowest position.
- 21. Hold the handle firmly. Be aware that the saw moves up or down slightly during start-up and stopping.
- 22. Make sure the blade is not contacting the workpiece before the switch is turned on.
- 23. Before using the tool on an actual workpiece, let it run for a while. Watch for vibration or wobbling that could indicate poor installation or a poorly balanced blade.
- 24. Wait until the blade attains full speed before cutting.
- 25. Stop operation immediately if you notice anything abnormal.
- 26. Do not attempt to lock the trigger in the on position.
- 27. Be alert at all times, especially during repetitive, monotonous operations. Don't be lulled into a false sense of security. Blades are extremely unforgiving.
- 28. Always use accessories recommended in this manual. Use of improper accessories such as abrasive wheels may cause an injury.

# SAVE THESE INSTRUCTIONS.

# IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER & BATTERY CARTRIDGE

- 1. SAVE THESE INSTRUCTIONS This manual contains important safety and operating instructions for battery charger.
- 2. Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- 3. CAUTION To reduce risk of injury, charge only MAKITA rechargeable batteries marked on the charger label. Other types of batteries may burst causing personal injury and damage.
- 4. Do not expose charger to rain or snow.
- 5. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.
- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- 7. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 8. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
  - a. That pins on plug of extension cord are the same number, size, and shape as those of plug on charger;
  - b. That extension cord is properly wired and in good electrical condition; and
  - c. That wire size is at least as large as the one specified in the table below.

# TABLE 1 RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS

Length of Cord (Feet)	25	50	100	150
AWG Size of Cord	18	18	18	16

- Do not operate charger with damaged cord or plug replace them immediately.
- 10. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 11. Do not disassemble charger or battery cartridge; take it to a qualified serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- 12. To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

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# ADDITIONAL SAFETY RULES FOR CHARGER & BATTERY CARTRIDGE

- Do not charge Battery Cartridge when temperature is BELOW 10°C (50°F) or ABOVE 40°C (104°F).
- 2. Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
- 3. Do not allow anything to cover or clog the charger vents.
- 4. A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
  - (1) Do not touch the terminals with any conductive material.
  - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.
  - (3) Do not expose battery cartridge to water or rain.
- 5. Do not store the tool and Battery Cartridge in locations where the temperature may reach or exceed 50°C (122°F).
- 6. Do not incinerate the Battery Cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.

# SAVE THESE INSTRUCTIONS.

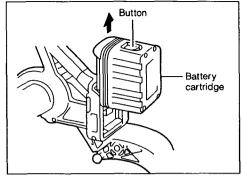
□ Cooling abnormality

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Symbols The following	show the symbols used for the charger. Be sure that you understand their meaning before use
(I) <b>+=</b>	☐ Ready to charge
<b>+</b>	☐ Charging
100%	☐ Charging complete
¥≋ţ	☐ Delay charge (Cooling)
<b>1.5</b> ×	☐ Deffective battery
<b>3</b>	☐ Conditioning

#### Installing or removing battery cartridge

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, withdraw it from the tool while sliding the button on the side of the cartridge.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If you can see the red part on the upper side on the

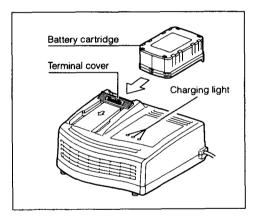


button, it is not locked completely. Insert it fully until the red part cannot be seen. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.

 Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

#### Charging

- Your new battery cartridge is not charged.
   You will need to charge it before use. Use the high capacity battery charger Model DC24SA to charge the battery cartridge.
- Plug the high capacity battery charger into the proper A/C voltage source. Two charging lights will flash in green color repeatedly.
- Insert the battery cartridge into charger until it stops adjusting to the guide of charger. Terminal cover of charger can be opened with inserting and closed with pulling out the battery cartridge.



- When the battery cartridge is inserted, the charging light color will change from green to red and charging will begin. The charging light will remain lit steadily during charging.
- One red charging light indicates charged condition in 0 80% and two red ones indicates
   80 100%
- •When charging is completed, the charging lights will change from two red ones to two green ones.
- The charging time is as follows: Battery B2417: approx. 30 minutes Battery B2430: approx. 60 minutes
- If you leave the battery cartridge in the charger after the charging cycle is complete, the charger will switch into its "trickle charge (maintenance charge)" mode which will last approximately 24 hours.
- After charging, unplug the charger from the power source.

#### Cooling system

This charger is equipped with cooling fan for heated battery in order to enable the battery to prove its own performance. Sound of cooling air comes out during cooling, which means not trouble on the charger.

Yellow light will flash for warning in the following cases.

- Trouble on cooling fan
- Incomplete cool down of battery, such as, being cloqued with dust

The battery can be charged in spite of the yellow warning light. But the charging time will be longer than usual in this case.

Check the sound of cooing fan, vent on the charger and battery, which can be sometime clogged with dust.

The cooling system is in order although no sound of cooling fan comes out, if the yellow warning light will not flash.

Always keep clean the vent on charger and battery for cooling.

The products should be sent to repair or maintenance, if the yellow warning light will frequently flash.

#### Conditioning charge

Conditioning charge can extend the life of battery by automatically searching the optimum charging condition for the batteries in every situations.

The battery employed in the following conditions repeatedly, will be worn out shortly, and yellow warning light may flash.

- 1. Recharge of battery with its high temperature
- 2. Recharge of battery with its low temperature
- 3. Recharge of full charged battery
- 4. Over-discharge of battery (continue to discharge battery in spite of down of power.)
- 5. Recharge under broken cooling system

The charging time of such battery is longer than usual.

#### CAUTION:

- The high capacity battery charger Model DC24SA is for charging Makita battery cartridge. Never use it for other purposes or for other manufacturer's batteries.
- When you charge a new battery cartridge or a battery cartridge which has not been used
  for a long period of time, it may not accept a full charge. This is a normal condition and
  does not indicate a problem. You can recharge the battery cartridge fully after discharging
  it completely and recharging a couple of times.
- If you charge a battery cartridge from a just-operated tool or a battery cartridge which has been left in a location exposed to direct sunlight or heat for a long time, the charging light may flash in red color. If this occurs, wait for a while. When the temperature on battery is more than approx. 70°C, two charging lights may flash in red color, and when approx. 50°C 70°C, one charging light in red color. Charging will begin after the battery cartridge is cooled by the cooling fan installed in the charger.

• If the charging light flashes alternately in green and red color, charging is not possible. The terminals on the charger or battery cartridge are clogged with dust or the battery cartridge is worn out or damaged.

#### Trickle charge (Maintenance charge)

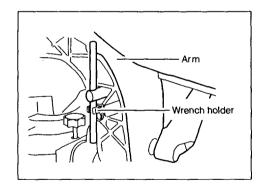
If you leave the battery cartridge in the charger to prevent spontaneous discharging after full charge, the charger will switch into its "trickle charge (maintenance charge)" mode and keep the battery cartridge fresh and fully charged.

#### Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged.
   Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 10°C 40°C (50°F 104°F).
   Let a hot battery cartridge cool down before charging it.
- Charge the Nickel Metal Hydride battery cartridge when you do not use it for more than six months.

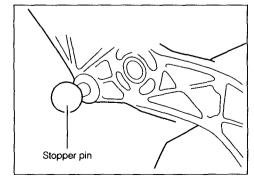
#### Socket wrench

The socket wrench is stored as shown in the figure. When using the socket wrench, pull it out of the wrench holder. After using the socket wrench, return it to the wrench holder.

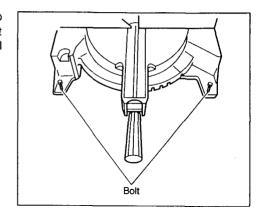


# Bench mounting saw

When the tool is shipped, the handle is locked in the lowered position by the stopper pin. Release the stopper pin by lowering the handle slightly and pulling the stopper pin.



This tool should be bolted with two bolts to a level and stable surface using the bolt holes provided in the tool's base. This will help prevent tipping and possible injury.

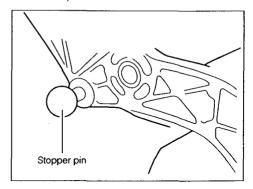


# Installing or removing saw blade

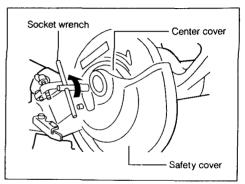
CAUTION:

- Always be sure that the tool is switched off and the battery cartridge is removed before installing or removing the blade.
- Use only the Makita socket wrench provided to install or remove the blade. Failure to do so may result in overtightening or insufficient tightening of the hex bolt. This could cause serious injury to operator or others in the general vicinity of the tool.

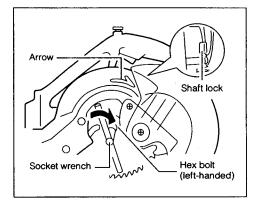
Lock the handle in the raised position by pushing in the stopper pin.



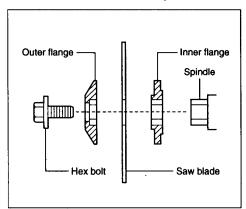
To remove the blade, use the socket wrench to loosen the hex bolt holding the center cover by turning it counterclockwise. Raise the safety cover and center cover.

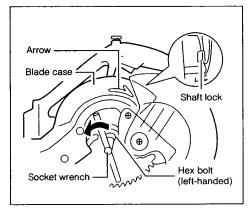


Press the shaft lock to lock the spindle and use the socket wrench to loosen the hex bolt (left-handed) clockwise. Then remove the hex bolt, outer flange and blade.

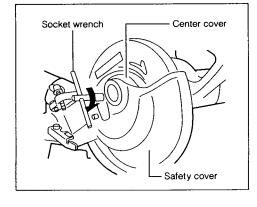


To install the blade, mount it carefully onto the spindle, making sure that the direction of the arrow on the surface of the blade matches the direction of the arrow on the blade case. Install the outer flange and hex bolt, and then use the socket wrench to tighten the hex bolt (left-handed) securely counterclockwise while pressing the shaft lock.



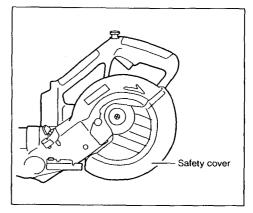


Return the safety cover and center cover to its original position. Then tighten the hex bolt clockwise to secure the center cover. Release the handle from the raised position by pulling the stopper pin. Lower the handle to make sure that the safety cover moves properly.



#### Safety cover

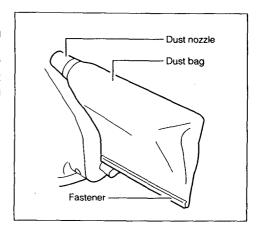
When lowering the handle, the safety cover rises automatically. The cover returns to its original position when the cut is completed and the handle is raised. NEVER DEFEAT OR REMOVE THE SAFETY COVER. In the interest of your personal safety, always maintain the safety cover in good condition. Any irregular operation of the safety cover should be corrected immediately. NEVER USE THE TOOL WITH A FAULTY SAFETY COVER. If the see-through safety cover becomes dirty, or sawdust adheres to it in such a way that the blade and/or workpiece



is no longer easily visible, remove the battery cartridge and clean the cover carefully with a damp cloth. Do not use solvents or any petroleum-based cleaners on the plastic cover.

#### **Dust bag**

The use of the dust bag makes cutting operations clean and dust collection easy. To attach the dust bag, fit the bag's entry port over the dust nozzle. When the dust bag is about half full, remove the dust bag from the tool and pull the fastener out. Empty the dust bag of its contents, tapping it lightly so as to remove particles adhering to the insides which might hamper further collection.



#### NOTE:

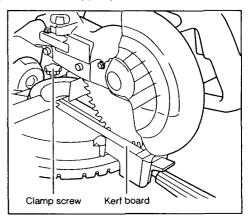
If you connect a Makita vacuum cleaner to your saw, more efficient and cleaner operations can be performed.

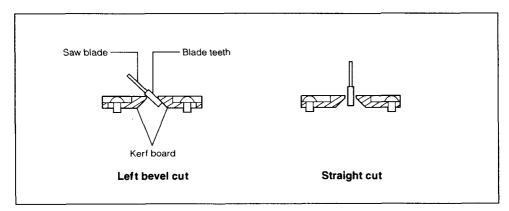
#### Positioning kerf board

This tool is provided with the kerf boards in the turn base. The kerf boards are factory adjusted so that the saw blade does not contact the kerf boards. Before use, adjust the kerf boards as follows:

First, remove the battery cartridge. Loosen the all screws (2 each on left and right) securing the kerf boards. Re-tighten them to the extent that the kerf boards can be easily moved by hand. Lower the handle fully and push in the stopper pin to lock the handle in

the lowered position. Loosen the clamp screw which secures the slide poles. Pull the carriage toward you fully. Adjust the kerf boards so that the kerf boards just contact the sides of blade teeth slightly. Tighten the front screws (do not tighten firmly). Push the carriage toward the guide fence fully and adjust the kerf boards so that the kerf boards just contact the sides of blade teeth slightly. Tighten the rear screws (do not tighten firmly). After adjusting the kerf boards, release the stopper pin and raise the handle. Then tighten the all screws securely.





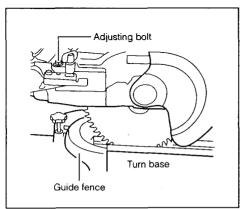
#### CAUTION:

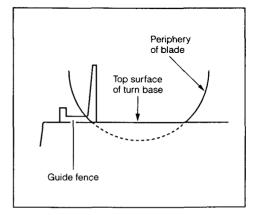
After changing the bevel angle, always readjust the kerf boards as described above.

#### Maintaining maximum cutting capacity

This tool is factory adjusted to provide the max. cutting capacity for a 190 mm (7-1/2") saw blade. When using a saw blade other than 190 mm (7-1/2") saw blade, adjust the lower limit position of the blade as follows:

First, remove the battery cartridge. Push the carriage toward the guide fence fully and lower the handle completely. Use the socket wrench to turn the adjusting bolt until the periphery of the blade extends slightly below the top surface of the turn base at the point where the front face of the guide fence meets the top surface of the turn base. With the battery cartridge removed, rotate the blade by hand while holding the handle all the way down to be sure that the blade does not contact any part of the lower base. Re-adjust slightly, if necessary.



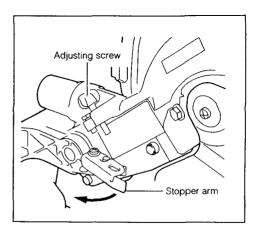


#### CAUTION:

After installing a new blade, always be sure that the blade does not contact any part of the lower base when the handle is lowered completely. Always do this with the battery cartridge removed.

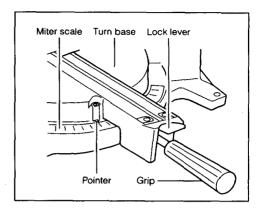
#### Stopper arm

The lower limit position of the blade can be easily adjusted with the stopper arm. To adjust it, move the stopper arm in the direction of the arrow as shown in the figure. Adjust the adjusting screw so that the blade stops at the desired position when lowering the handle fully.



#### Positioning for adjusting the miter angle

The turn base turns up to 47° to the left and 57° to the right. Loosen the grip by turning counterclockwise. Turn the turn base while pressing down the lock lever. When you have moved the grip to the position where the pointer points to the desired angle on the miter scale, securely tighten the grip clockwise.

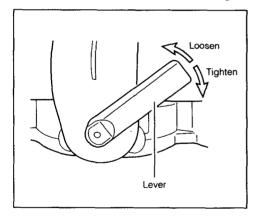


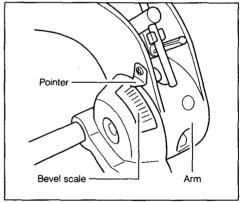
#### CAUTION:

- •When turning the turn base, be sure to raise the handle fully.
- After changing the miter angle, always secure the turn base by tightening the grip firmly.

#### Positioning for adjusting the bevel angle

The saw blade tilts up to 45° to the left. To adjust the bevel angle, loosen the lever at the rear of the tool. Push the handle to the left to tilt the saw blade until the pointer points to the desired angle on the bevel scale. Tighten the lever to secure the arm.





#### CAUTION:

- When tilting the saw blade, be sure to raise the handle fully.
- After changing the bevel angle, always secure the arm by tightening the lever.

# Securing workpiece

#### WARNING:

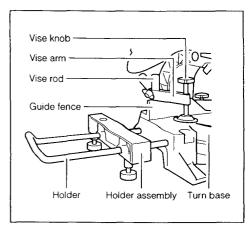
It is extremely important to always secure the workpiece properly and tightly with the vise. Failure to do so can cause the tool to be damaged and/or the workpiece to be destroyed. PERSONAL INJURY MAY ALSO RESULT. Also, after a cutting operation, DO NOT raise the blade until the blade has come to a complete stop.

#### 1. Vertical vise

The vertical vise can be installed in two positions on either the left or right side of the guide fence, or the holder assembly (optional accessory).

Insert the vise rod into the hole in the guide fence or the holder assembly and tighten the screw to secure the vise rod. (Note: When using the holder assembly, install it on the holder as shown in the figure.)

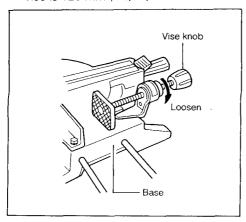
Position the vise arm according to the thickness and shape of the workpiece and secure the vise arm by tightening the screw.

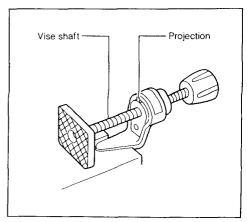


Make sure that no part of the tool contacts the vise when lowering the handle fully or when pulling or pushing the carriage. If some part contacts the vise, re-position the vise. Press the workpiece flat against the guide fence and the turn base. Position the workpiece at the desired cutting position and secure it firmly by tightening the vise knob. The maximum thickness of workpieces which can be secured by the vertical vise is 50 mm (2").

#### 2. Horizontal vise (optional accessory)

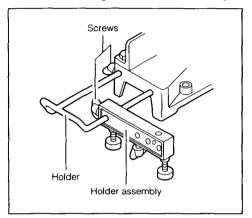
The horizontal vise can be installed on the left side of the base. By turning the vise knob counterclockwise, the screw is released and the vise shaft can be moved rapidly in and out. To grip workpieces, turn the vise knob gently clockwise until the projection reaches its topmost position, then fasten securely. If the vise knob is forced in or pulled out while being turned clockwise, the projection may stop at an angle. In this case, turn the vise knob back counterclockwise until the screw is released, before turning again gently clockwise. The maximum width of workpieces which can be secured by the horizontal vise is 120 mm (4-3/4").

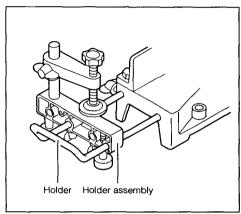




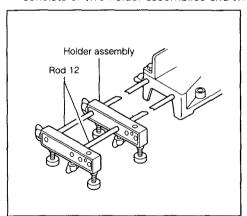
#### 3. Holders and holder assembly (optional accessories)

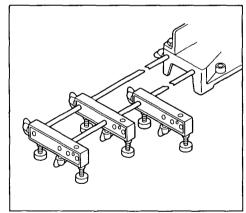
The holders and the holder assembly can be installed on either side as a convenient means of supporting workpieces horizontally. Install them as shown in the figures below. Then tighten the screws firmly to secure the holders and the holder assembly.





When cutting long workpieces, use the holder-rod assembly (optional accessory). It consists of two holder assemblies and two rods 12.





#### CAUTION:

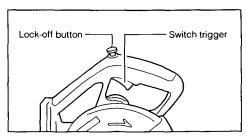
Always support long workpieces level with the top surface of the turn base for accurate cuts and to prevent dangerous loss of control of the tool.

#### Switch action

#### CAUTION:

- Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.
- When not using the tool, remove the lock-off button and store it in a secure place. This
  prevents unauthorized operation.

To prevent the switch trigger from being accidentally pulled, a lock-off button is provided. To start the tool, press in the lock-off button and pull the switch trigger. Release the switch trigger to stop.



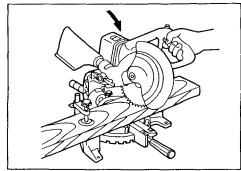
#### Operation

#### CAUTION:

- Before use, be sure to release the handle from the lowered position by pulling the stopper pin.
- Make sure the blade is not contacting the workpiece, etc. before the switch is turned on.
- Do not apply excessive pressure on the handle when cutting. Too much force may result in overload of the motor and/or decreased cutting efficiency.
- Gently press down the handle to perform the cut. If the handle is pressed down with force or if lateral force is applied, the blade will vibrate and leave a mark (saw mark) in the workpiece and the precision of the cut will be impaired.
- During a slide cut, gently push the carriage toward the guide fence without stopping. If the carriage movement is stopped during the cut, a mark will be left in the workpiece and the precision of the cut will be impaired.

#### 1. Press cutting (cutting small workpieces)

- •Workpieces up to 50 mm (2") high and 97 mm (3-13/16") wide can be cut in the following way.
- •Push the carriage toward the guide fence fully and tighten the clamp screw to secure the carriage. Secure the workpiece with the vise. Switch on the tool and wait until the blade attains full speed before lowering gently into the cut. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



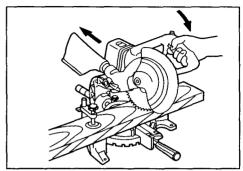
#### CAUTION:

Firmly tighten the clamp screw so that the carriage will not move during operation. Insufficient tightening may cause unexpected kickback of the blade. Possible serious injury may result.

#### 2. Slide (push) cutting (cutting wide workpieces)

- •Workpieces up to 50 mm (2") high and 182 mm (7-1/8") wide can be cut in the following way.
- •Loosen the clamp screw so that the carriage can slide freely. Secure the workpiece

with the vise. Pull the carriage toward you fully. Switch on the tool and wait until the blade attains full speed. Press down the handle and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE TO CUT THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



#### CAUTION:

- •Whenever performing the slide cut, FIRST PULL THE CARRIAGE TOWARD YOU FULLY and press down the handle to the fully lowered position, the PUSH THE CARRIAGE TOWARD THE GUIDE FENCE. If you perform the slide cut without pulling the carriage fully or if you perform the slide cut toward your direction, the blade may kick back unexpectedly with the potential to cause serious injury.
- •Never perform the slide cut with the handle locked in the lowered position by pressing the stopper pin.
- •Never loosen the clamp screw which secures the cartridge while the blade is rotating. This may cause serous injury.

#### 3. Miter cutting

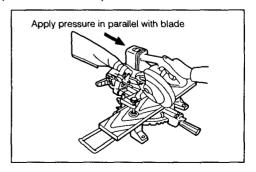
Refer to the previously covered "Positioning for adjusting the miter angle".

#### 4. Bevel cutting

At a left 45° bevel angle, workpieces 35 mm (1-3/8") high and 182 mm (7-1/8") wide can be cut.

Loosen the lever and tilt the saw blade to set the bevel angle. Refer to the previously covered "Positioning for adjusting the bevel angle". Be sure to re-tighten the lever firmly to secure the selected bevel angle safely. Secure the workpiece with the vise. Switch

on the tool and wait until the blade attains full speed. Then gently lower the handle to the fully lowered position while applying pressure in parallel with the blade and PUSH THE CARRIAGE TOWARD THE GUIDE FENCE TO CUT THE WORKPIECE. When the cut is completed, switch off the tool and WAIT UNTIL THE BLADE HAS COME TO A COMPLETE STOP before returning the blade to its fully elevated position.



#### CAUTION:

- •During a bevel cutting, it may create a condition whereby the piece cut off will come to rest against the side of the blade. If the blade is raised while the blade is still rotating, this piece may be caught by the blade, causing fragments to be scattered around which is dangerous. The blade should be raised ONLY after the blade has come to a complete stop.
- •When pressing down the handle, apply pressure in parallel with the blade. If a force is applied perpendicularly to the turn base or if the pressure direction is changed during a cut, the precision of the cut will be impaired.

#### 5. Compound cutting

Compound cutting is the process in which a bevel angle is made at the same time in which a miter angle is being cut on a workpiece. Compound cutting can be performed at angle shown in the table right.

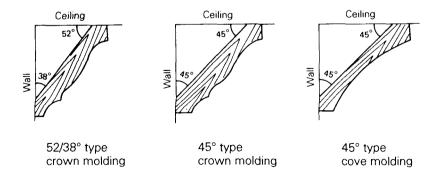
Miter angle	Bevel angle
Left and Right 45°	Left 0 ~ 45°
Right 50°	Left 0 - 40°
Right 55°	Left 0 ~ 30°
Right 57°	Left 0 – 25°

At the miter angle of left 45° and bevel angle of left 45°, workpieces 35 mm (1-3/8") high and 127 mm (5") wide can be cut.

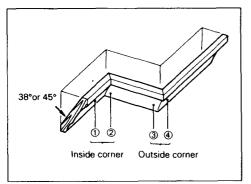
When performing compound cutting, refer to "Press cutting", "Slide cutting", "Miter cutting" and "Bevel cutting" explanations.

#### 6. Cutting crown and cover moldings

- •Crown and cove moldings can be cut on a compound miter saw with the moldings laid flat on the turn base.
- •There are two common types of crown moldings and one type of cove moldings; 52/38° wall angle crown molding, 45° wall angle crown molding and 45° wall angle cove molding. See illustrations below.



•There are crown and cove molding joints which are made to fit "Inside" 90° corners (1) and 2) in Fig. C) and "Outside" 90° corners (3) and 4 in Fig. C).



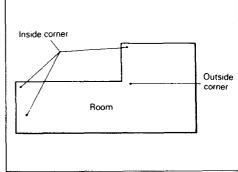


Fig. (C)

When cutting crown and cove moldings, set the bevel angle and miter angle as indicated in the table (A) and position the moldings on the top surface of the saw base as indicated in the table (B).

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	Molding position		Bevel angle		Miter angle	
	in Fig. (C)		52/38° type	45° type	52/38° type	45° type
		1	Left 33.9° Left 30°	1-6-209	Right 31.6°	Right 35.3°
For inside corner	2	Left 31.6°			Left 35.3°	
For outside corner		3		Lett 30	Leit 31.0	Left 55.5
		4			Right 31.6°	Right 35.3°

Table (B)

	Molding po in Fig. (C).		Molding edge against guide fence	Finished piece	
		0	Ceiling contact edge should be against guide fence.	Finished piece will be on the	
For inside corner		2	Wall contact edge should be	Left side of blade.	
		3	against guide fence.	Finished piece will be on the	
For outside corner		4	Ceiling contact edge should be against guide fence.	Right side of blade.	

#### (Example)

In the case of cutting 52/38° type crown molding for position ① in Fig. (C):

- •Tilt and secure bevel angle setting to 33.9° LEFT.
- Adjust and secure miter angle setting to 31.6° RIGHT.
- •Lay crown molding with its broad back surface down on the turn base with its CEIL-ING CONTACT EDGE against the guide fence on the saw.
- •The finished piece to be used will always be on the LEFT side of the blade after the cut has been made.

# Compound Miter Saw Miter and Bevel Angle Settings



# Wall to Crown Molding Angle: 52 / 38 degrees

Wall	Bevel	Miter
Angle	Angle	Angle
(deg.)	(deg.)	(deg.)
<b>_∆</b> 60	43.0	46.8
61	42.8	46.3
62	42.5	45.7
63	42.2	45.1
64	41.9	44.6
65	41.7	44.0
66	41.4	43.5
67	41.1	42.9
68	40.8	42.4
69	40.5	41.9
70	40.2	41.3
71	39.9	40.8
72	39.6	40.3
73	39.3	39.8
74	39.0	39.2
75	38.7	38.7
76	38.4	38.2
77	38.1	37.7
78	37.8	37.2
79	37.4	36.8
80	37.1	36.3
81	36.8	35.8
82	36.5	35.3
83	36.2	34.8
84	35.8	34.4
85	35.5	33.9
86	35.2	33.4
87	34.9	33.0
88	34.5	32.5
89	34.2	32.1
<b>_d</b> 90	33.9	31.6
91	33.5	31.2
92	33.2	30.7
93	32.8	30.3
94	32.5	29.9
95	32.2	29.4
96	31.8	29.0
97	31.5	28.6
98	31.1	28.2
99	30.8	27.7
100	30.4	27.3

Wall	Bevel	Miter	
Angle	Angle	Angle	
(deg.)	(deg.)	(deg.)	
101	30.1	26.9	
102	29.7	26.5	
103	29.4	26.1	
104	29.0	25.7	
105	28.7	25.3	
106	28.3	24.9	
107	28.0	24.5	
108	27.6	24.1	
109	27.2	23.7	
110	26.9	23.3	
111	26.5	22.9	
112	26.1	22.6	
113	25.8	22.2	
114	25.4	21.8	
115	25.0	21.4	
116	24.7	21.0	
117	24.3	20.7	
118	23.9	20.3	
119	23.6	19.9	
<b>1</b> 120	23.2	19.6	
121	22.8	19.2	
122 123	22.5	18.8	
	22.1	18.5	
124	21.7	18.1	
125	21.3	17.8	
126	21.0	17.4	
127	20.6	17.1	
128	20.2	16.7	
129	19.8	16.4	
130	19.5	16.0	
131	19.1	15.7	
132	18.7	15.3	
133	18.3	15.0	
134	17.9	14.6	
135	17.6	14.3	
136	17.2	14.0	
137	16.8	13.6	
138	16.4	13.3	
139	16.0	13.0	
140	15.6	12.8	
	•		

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Wall	Bevel	Miter	
Angle	Angle	Angle	
(deg.)	(deg.)	(deg.)	
141	15.3	12.3	
142	14.9	12.0	
143	14.5	11.6	
144	14.1	11.3	
145	13.7	11.0	
146	13.3	10.7	
147	12.9	10.3	
148	12.5	10.0	
149	12.2	9.7	
<i>→</i> 150	11.8	9.4	
151	11.4	9.0	
152	11.0	8.7	
153	10.8	8.4	
154	10.2	8.1	
155	9.8	7.8	
156	9.4	7.5	
157	9.0	7.1	
158	8.6	6.8	
159	8.3	6.5	
160	7.9	6.2	
161	7.5	5.9	
162	7.1	5.6	
163	6.7	5.3	
164	6.3	4.9	
165	5.9	4.6 4.3	
166	5.5		
167	5.1	4.0	
168	4.7	3.7	
169	4.3	3.4	
170	3.9	3.1	
171	3.5	2.8	
172	3.2	2.5	
173	2.8	2.2	
174	2.4	1.8	
175	2.0	1.5	
176	1.6	1.2	
177	1.2	0.9	
178	0.8	0.6	
178	0.4	0.8	
100	+		
<u> </u>	0.0	0.0	

# Compound Miter Saw Miter and Bevel Angle Settings



# Wall to Crown Molding Angle: 45 degrees

Wall	Bevel	Miter	
Angle	Angle	Angle	
(deg.)	(deg.)	(deg.)	
<u> </u>	37.8	50.8	
61	37.5	50.2	
62	37.3	49.6	
63	37.1	49.1	
64	36.8	48.5	
65	36.6	48.0	
66	36.4	47.4	
67	36.1	46.9	
68	35.9	46.4	
69	35.6	45.8	
70	35.4	45.3	
71	35.1	44.8	
72	34.9	44.2	
73			
74	34.4	43.2	
75	34.1	42.7	
76	33.9	42.1	
77	33.6	41.6	
78	33.3	41.1	
79	33.1	40.6	
80	32.8	40.1	
81	32.5	39.6	
82	32.3	39.1	
83	32.0	38.6	
84	31.7	38.1	
85			
86	31.1	37.2	
87	30.9	36.7	
88	30.6	36.2	
89	30.3	35.7	
<b>_d</b> 90	30.0	35.3	
91	29.7	34.8	
92	29.4	34.3	
93	29.1	33.9	
94	28.8	33.4	
95	28.5	32.9	
96	28.2	32.5	
97	27.9	32.0	
98	27.6	31.6	
99	27.3	31.1	
100	27.0	30.7	

Wall	Bevel Miter		
Angle	Angle	Angle	
(deg.)	(deg.) (deg.)		
101	26.7	30.2	
102	26.4	29.8	
103	26.1	29.4	
104	25.8	28.9	
105	25.5	28.5	
106	25.2	28.1	
_107	24.9	27.6	
108	24.6	27.2	
109	24.2	26.8	
110	23.9	26.3	
111	23.6	25.9	
112	23.3	25.5	
113	23.0	25.1	
114	22.7	24.7	
115	22.3	24.3	
116	22.0	23.8	
117	21.7	23.4	
118	21.4	23.0	
119	21.0	22.6	
	20.7	22.2	
121	20.4	21.8	
122	20.0	21.4	
123	19.7	21.0	
124	19.4	20.6	
125	19.1	20.2	
126	18.7	19.8	
127	18.4	19.4	
128	18.1	19.0	
129	17.7	18.6	
130	17.4	18.2	
131	17.1	17.9	
132	16.7	17.5	
133	16.4	17.1	
134	16.0	16.7	
135	15.7	16.3	
136	15.4	15.9	
137		15.6	
	15.0		
138	14.7	15.2	
139	14.3	14.8	
140	14.0	14.4	

Wall	Bevel Miter		
Angle	Angle	Angle	
(deg.)	(deg.)	(deg.)	
141	13.7 13.3	14.1 13.7	
142	13.3		
143		13.3	
	12.6	12.9	
145 146	12.3 11.9	12.6 12.2	
146			
147	11.6	11.8 11.5	
	11.2		
149	10.9	11.1	
<i>→</i> 150	10.5	10.7	
151	10.2	10.4	
152	9.8	10.0	
153	9.5	9.6	
154	9.2	9.3	
155	8.8	8.9	
156	8.5	8.5	
157	8.1	8.2	
158	7.8	7.8	
159	7.4	7.5	
160	7.1	7.1	
161	6.7	6.7	
162	6.4	6.4	
163	6.0	6.0	
164	5.6	5.7	
165	5.3	5.3	
166	4.9	5.0	
167	4.6	4.6	
168	4.2	4.3	
169	3.9	3.9	
170	3.5	3.5	
171	3.2	3.2	
172	2.8	2.8	
173	2.5	2.5	
174	2.1	2.1	
175	1.8	1.8	
176	1.4	1.4	
177	1.1	1.1	
178	0.7	0.7	
179	0.4	0.4	
<b>A</b> 180	0.0	0.0	

#### 7. Cutting repetitive lengths

When cutting several pieces of stock to the same length, ranging from 220 mm (8-5/8") to 385 mm (15-1/8"), use of the set plate (optional accessory) will facilitate more efficient operation. Install the set plate on the holder as shown in the figure. Align the cutting line on your workpiece with either the left or right side of the groove in the kerf board, and while holding the workpiece from moving, move the set plate flush against the end of the workpiece. Then secure the set plate with the screw. When the set

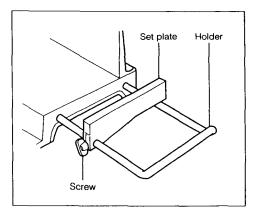


plate is not used, loosen the screw and turn the set plate out of the way.

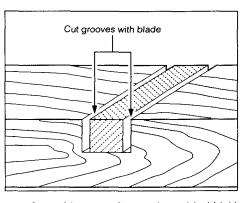
#### NOTE:

Use of the holder-rod assembly (optional accessory) allows cutting repetitive lengths, ranging from 220 mm (8-5/8") to 2,230 mm (7.3 ft.)

#### 8. Groove cutting

A dado type cut can be made by proceeding as follows:

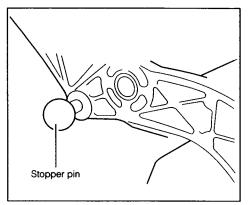
Adjust the lower limit position of the blade using the adjusting screw and the stopper arm to limit the cutting depth of the blade. Refer to "Stopper arm" explanations described on previous page. After adjusting the lower limit position of the blade, cut parallel grooves across the width of the workpiece using a slide (push) cut as shown in the figure. Then remove the workpiece material between

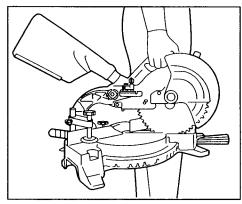


the grooves with a chisel. Do not attempt to perform this type of cut using wide (thick) blades or with a dado blade. Possible loss of control and injury may result.

#### Carrying tool

Make sure that the battery cartridge is removed. Secure the blade at 0° bevel angle and the turn base at 57° miter angle to the right. Secure the slide poles after pulling the carriage toward you fully. Lower the handle fully and lock it in the lowered position by pushing in the stopper pin. Carry the tool by the carrying grip as shown in the figure below.





#### CAUTION:

- Always secure all moving portions before carrying the tool.
- Stopper pin is for carrying and storage purposes only and not for any cutting operations.

#### MAINTENANCE

#### CAUTION:

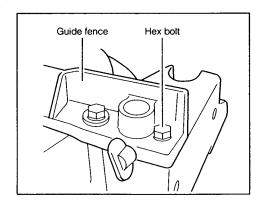
Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

#### Adjusting the cutting angle

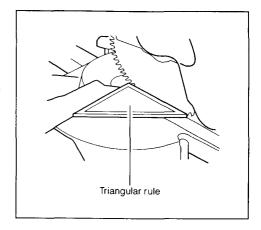
This tool is carefully adjusted and aligned at the factory, but rough handling may have affected the alignment. If your tool is not aligned properly, perform the following:

#### 1) Miter angle

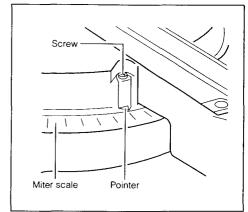
Push the carriage toward the guide fence and tighten the clamp screw to secure the carriage. Loosen the grip which secures the turn base. Turn the turn base so that the pointer points to 0° on the miter scale. Then turn the turn base slightly clockwise and counterclockwise to seat the turn base cozily in the 0° miter notch. Loosen the three hex bolts securing the guide fence using the socket wrench.



Lower the handle fully and lock it in the lowered position by pushing in the lock pin. Square the side of the blade with the face of the guide fence using a triangular rule, try square, etc. Then securely tighten the hex bolts on the guide fence in the order from right side.



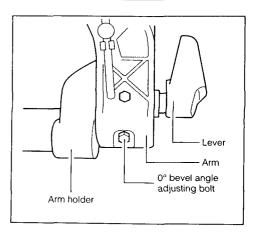
Make sure that the pointer points to 0° on the miter scale. If the pointer does not point to 0°, loosen the screw which secures the pointer and adjust the pointer so that it will point to 0°.



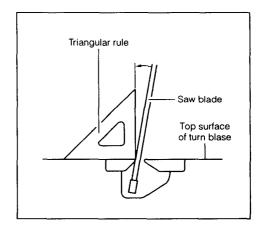
#### 2) Bevel angle

#### i) 0° bevel angle

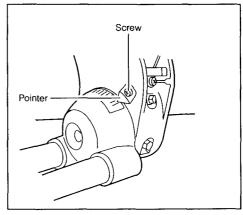
Push the carriage toward the guide fence and tighten the clamp screw to secure the carriage. Lower the handle fully and lock it in the lowered position by pushing in the lock pin. Loosen the lever at the rear of the tool. Turn the 0° bevel angle adjusting bolt (lower bolt) on the right side of the arm two or three revolutions counterclockwise to tilt the blade to the right.



Carefully square the side of the blade with the top surface of the turn base using the triangular rule, try square, etc. by turning the 0° bevel angle adjusting bolt clockwise. Then tighten the lever securely.

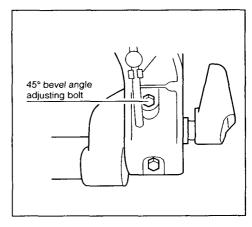


Make sure that the pointer on the arm points to 0° on the bevel scale on the arm holder. If it does not point to 0°, loosen the screw which secures the pointer and adjust the pointer so that it will point to 0°.



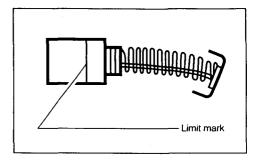
#### ii) 45° bevel angle

Adjust the 45° bevel angle only after performing 0° bevel angle adjustment. To adjust left 45° bevel angle, loosen the lever and tilt the blade 45° to the left. Make sure that the pointer on the arm points to 45° on the bevel scale on the arm holder. If the pointer does not point to 45°, turn the 45° bevel angle adjusting bolt (upper bolt) on the right side of the arm until the pointer points to 45°.

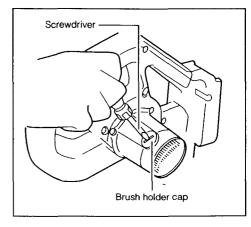


#### Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes



Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.



To maintain product SAFETY and RELIABILITY, repairs, maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

#### **ACCESSORIES**

#### CAUTION:

These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. The accessories or attachments should be used only in the proper and intended manner.

#### Dust bag

Part No. 122523-9



#### Holder set

Part No. 192621-3



# Socket wrench 10

Part No. 782223-9



#### • Triangular rule

Part No. 762001-3



# Lock-off button

Part No. 411478-6



#### Vertical vise (with screw)

Part No. 193037-5



#### Carbide-tipped saw blade



#### Safety goggles

Part No. 191686-2

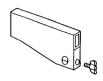


Fast, smoother, longer sawing without blade sharpening. Curs wood.

Part No.	Dia. (mm)	Hole dia. (mm)	No. teeth
A-90912	190 (7-1/2")	15.88 (5/8")	40
A-90607	190 (7-1/2")	15.88 (5/8")	72

# • Set plate

Part No. 122472-0



#### High Capacity Battery Charger Model DC24SA



#### • Ni-MH (Nickel Metal Hydride) battery B2417

Part No. 193128-2



# · Vise assembly (horizontal vise)

Part No. 122567-9



#### Holder assembly

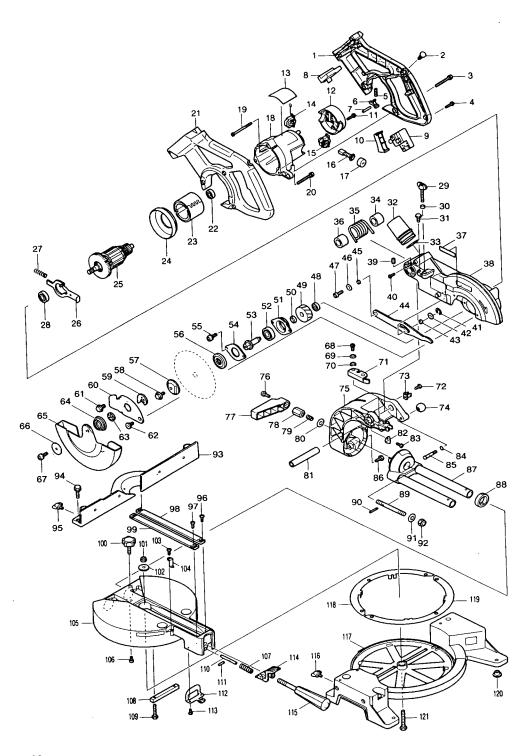
Part No. 192713-8



#### Ni-MH (Nickel Metal Hydride) battery B2430

Part No. 193131-3





# MAKITA LIMITED ONE YEAR WARRANTY

#### Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one-year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- The tool has been abused, misused or improperly maintained;
- · alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE-YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

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